



# National Preparedness Month: #BringDownBarriers to Emergency Preparedness and Response

September 15, 2021

# Agenda

- Welcome & Introductions
  - National Preparedness Month
    - Ethan Riley, Center for Preparedness and Response (CPR)
  - Accessible Materials and Culturally Relevant Messages for Individuals with Disabilities
    - Laura Baldwin, National Center for Birth Defects and Developmental Disabilities (NCBDDD)
  - Creating Accessible and Inclusive COVID-19 Materials for People with Disabilities
    - Carolyn Phillips and Liz Persaud, Georgia Tech's Center for Inclusive Design and Innovation (CIDI)
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## Continuing Education Credits for this EPIC Webinar

- All continuing education credits for EPIC Webinars are issued online through the CDC Training & Continuing Education Online system (<https://tceols.cdc.gov/>).
  - Those who participated in today's EPIC Webinar and who wish to receive continuing education credits should complete the online evaluation by October 18, 2021 with the course code WC4028.
  - Those who will participate in the on-demand activity and wish to receive continuing education credits should complete the online evaluation between October 19, 2021 and October 19, 2023 and use course code WD4028.
  - Continuing education certificates can be printed immediately upon completion of your online evaluation. A cumulative transcript of all CDC/ATSDR CEs obtained through the CDC Training & Continuing Education Online System will be maintained for each user.
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## Course Access Code

The course access code is EPIC0915



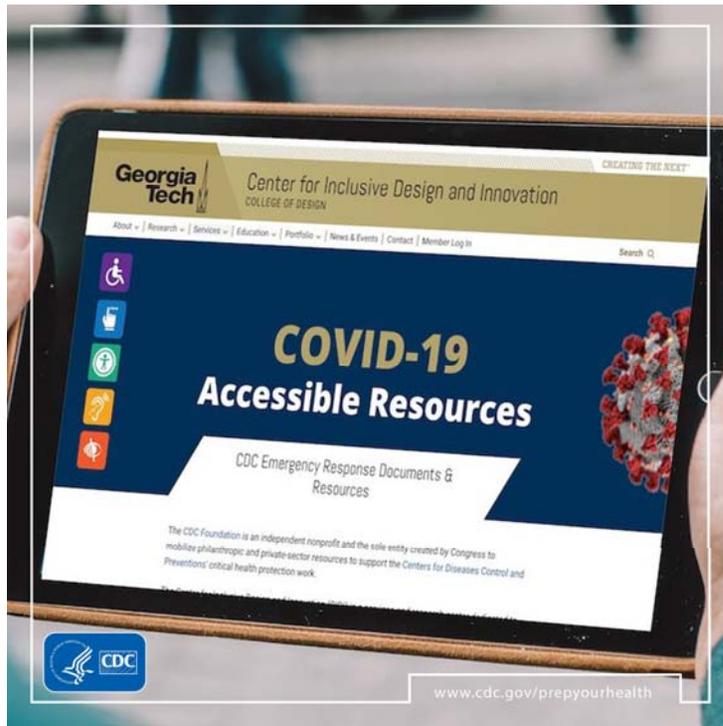
**National Preparedness Month**

# National Preparedness Month



- **September is National Preparedness Month**
- **#PrepYourHealth toolkits:**
  - [“Take Action”](#) (2019)
  - [“Create Community”](#) (2020)
  - [#BringDownBarriers](#) (2021)
- **Public Health Matters blog**

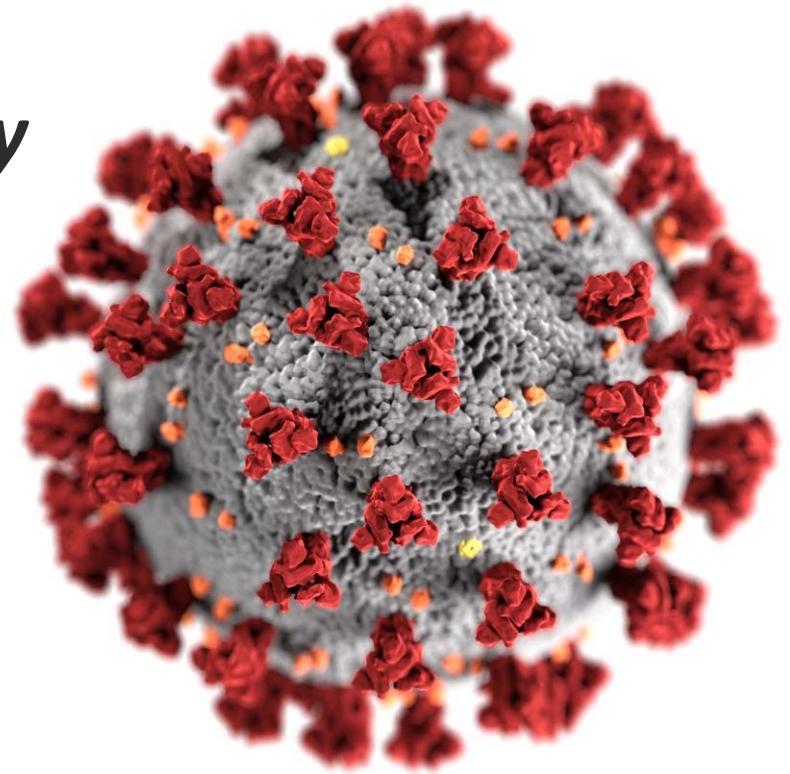
# #PrepYourHealth Digital Media Toolkit



- **Collaboration with other CDC centers**
- **Barriers & disparities that affect participation in emergency preparedness & response**
  - Social Barriers
  - Programmatic Barriers
  - Transportation Barriers
  - Communication Barriers

# *Accessible Materials and Culturally Relevant Messages for Individuals with Disabilities*

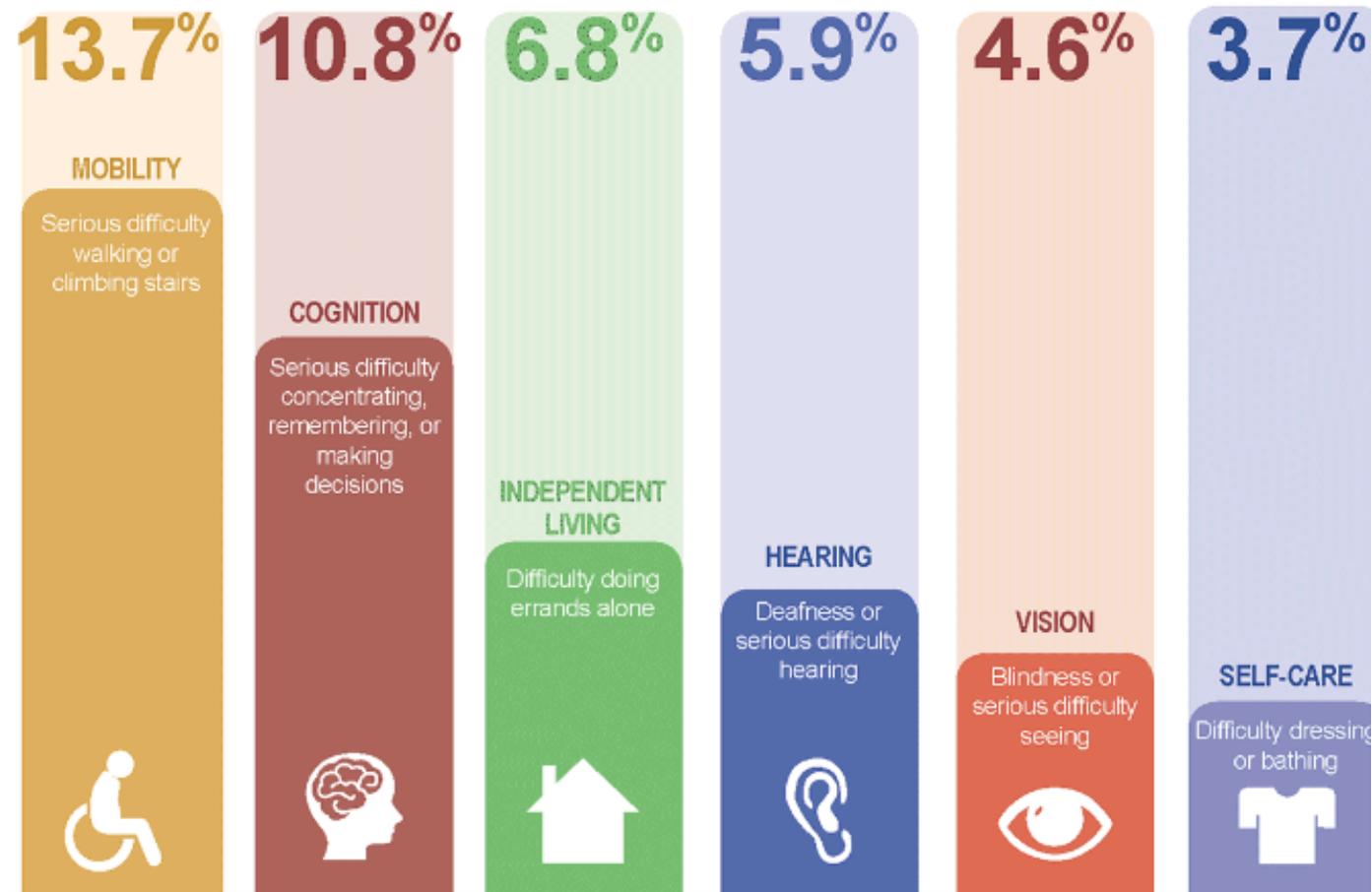
September 15, 2021



[cdc.gov/coronavirus](https://cdc.gov/coronavirus)

# 1 in 4 American Adults Has a Disability

Percentage of adults with functional disability types



State-based data at: <https://www.cdc.gov/ncbddd/disabilityandhealth/dhds/index.html>

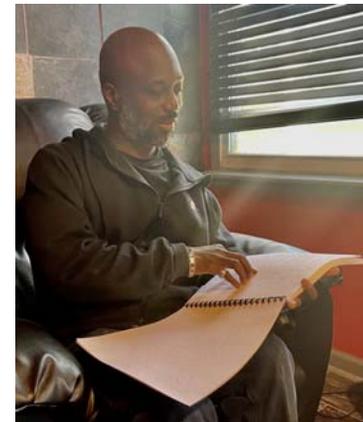
# Need for Accessible Resources

Millions of people require some form of accessible information:

- 1 in 4 American adults has a disability
  - 37 million people are deaf or hard of hearing
    - 2 million people who are deaf or hard of hearing use American Sign Language (ASL)
    - 4 million people have low vision
      - 1 million people are blind
        - 100,000 people who are blind use braille
- 52 million people have low literacy



Braille photos source: CIDI



Clear mask photo source: bing.com

Centers for Disease Control and Prevention. Disability and Health Promotion. [Disability Affects All of Us](https://www.cdc.gov/ncbddd/disabilityandhealth/infographic-disability-impacts-all.html). <https://www.cdc.gov/ncbddd/disabilityandhealth/infographic-disability-impacts-all.html>

Mitchell, R.E., How Many Deaf People Are There in the United States? Estimates From the Survey of Income and Program Participation. *The Journal of Deaf Studies and Deaf Education*, 2006. 11(1): p. 112-119. [https://www.gallaudet.edu/documents/Research-Support-and-International-Affairs/ASL\\_Users.pdf](https://www.gallaudet.edu/documents/Research-Support-and-International-Affairs/ASL_Users.pdf)

# Health Inequity – People with Disabilities

- Experience significant disadvantages related to health:
  - 3x more likely to have heart disease, stroke, diabetes, or cancer than adults without disabilities
  - More likely to be current smokers, overweight, and report their health as fair or poor vs. adults without disabilities
  - Challenges in accessing health care and information (lack of providers + training, transportation, and accessibility)
  - Historic gaps in demographic data in surveillance

Health Equity in Action

Updated May 28, 2021 Languages Print



To help the United States succeed against COVID-19, CDC is working with state, territorial, local, and tribal partners, and community-serving organizations, to ensure all public health actions address health disparities for all populations.

Populations of Focus

- Racial and ethnic minority populations
- People living in rural or frontier areas
- People experiencing homelessness
- **People with disabilities**
- People with substance use disorders
- People who are justice-involved

Source: <https://www.cdc.gov/ncbddd/disabilityandhealth/disability-inclusion.html>

# COVID-19 and People with Disabilities



# Higher COVID-19 Risk for Some People with Disabilities

You may be at higher risk of getting very sick from COVID-19 if you:



Live in a group setting



Have trouble practicing preventive measures, like wearing a mask



Need to have close contact with care providers



Have certain medical conditions, like Down syndrome



[cdc.gov/coronavirus](https://www.cdc.gov/coronavirus)

# Gaps and Needs

- Concerns about accessibility and inclusion

- Beyond 508 standards
- Representation of people with disabilities in imagery
- Applicability of guidance

- Listening sessions with partners

- Literacy level major problem for multiple communities & formats
- Partners developed materials which became models
- Diversity and qualifications of ASL interpreters



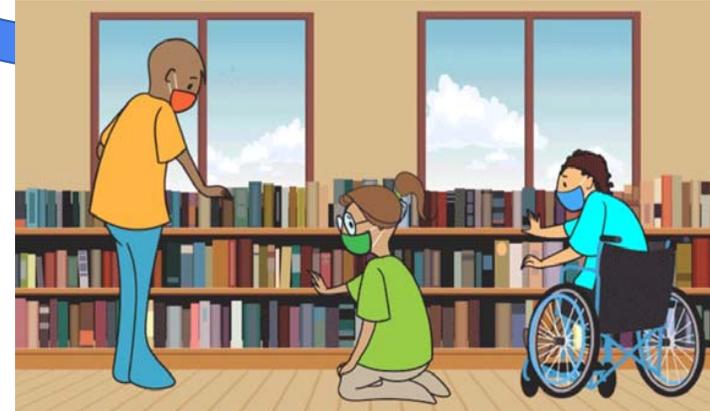
# CDC Supporting Health Equity in Action - Disability

## Project 1:

- GA Tech's Center for Inclusive Design and Innovation (CIDI) via CDCF grant
- CDC providing technical assistance

## Project 2:

- RTI contracted by CDC to conduct formative work with people with intellectual and developmental disabilities who have extreme low literacy AND their caregivers



[Health Equity for People with Disabilities](#)

**Goal for both Projects:** Develop COVID-19 resources in alternative formats based upon CDC's guidance + train CDC staff

# Creating Accessible And Inclusive COVID-19 Materials for People With Disabilities

CDC EPIC Webinar  
September 15, 2021

CREATING THE NEXT®

# GT CIDI Presenters



- **Carolyn Phillips, Principal Investigator**
- Director, Tools for Life and Services and Education
- Center for Inclusive Design and Innovation
- [carolyn.phillips@gatfl.gatech.edu](mailto:carolyn.phillips@gatfl.gatech.edu)



- **Liz Persaud, Co-Principal Investigator**
- Program and Outreach Manager, Tools for Life
- Center for Inclusive Design and Innovation
- [liz.persaud@gatfl.gatech.edu](mailto:liz.persaud@gatfl.gatech.edu)

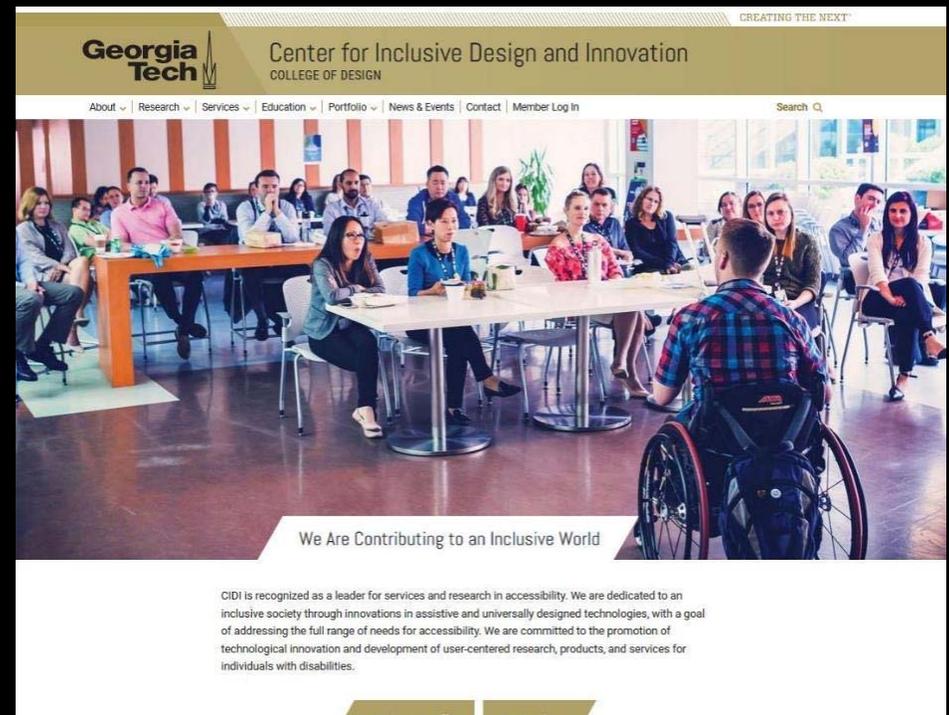
**Thank you to our funder!**

Georgia Tech  Center for Inclusive  
Design and Innovation

This project is made possible due to funding from the CDC Foundation along with technical assistance from the Centers for Disease Control and Prevention (CDC).

# Accessibility Made Smart at CIDI

- Accessibility Consulting – ICT & UX
- Braille Services
- Captioning and Described Audio Services
- Professional E-Text Producers
- Certified Assistive Technology Team
- Tools for Life is Celebrating 30 Years of Service this Year!



# Accessible Communications as Emergency Preparedness

- In order to achieve equity in emergency response and public health efforts, it is necessary to increase accessibility of communications materials for people with disabilities.
- **Increased accessibility for people with disabilities benefits everyone.**

# Accessible Communications

- Are usable by all individuals, regardless of disability status;
- Meet the legal requirements of Title III of the Americans with Disabilities Act;
- Comply with Section 508 Standards for federal departments and agencies;
- Make it possible for people with disabilities who use alternate formats to fully participate in activities, and,
- Make it possible for those with commercial, educational, or social messages to reach the one-fourth of the population who have disabilities.

# **Project Background –** ***Accessible Materials and Culturally Relevant*** ***Messages for Individuals with Disabilities*** ***Project***

- COVID-19 has disproportionately affected many groups, including the 1 in 4 people in the United States living with a disability.
- While the COVID-19 guidance on CDC's website is accessible for some people with disabilities as required by Section 508 of the Rehabilitation Act (e.g., those using assistive technology devices, closed captions on videos, etc.), content is needed in alternate formats such as simplified text, braille, and American Sign Language (ASL) videos.
- It is important that COVID-19 guidelines are not only accessible to people with disabilities but also consider cultural challenges that people with disabilities face while trying to follow them.

# Needs Assessment and Message Testing



- CIDI conducted a needs assessment with individuals with disabilities, as well as organizations that serve disability audiences, to inform this project.
- Adapted materials have been message tested with our audiences of focus to ensure accurate translation and cultural relevancy to people with disabilities.

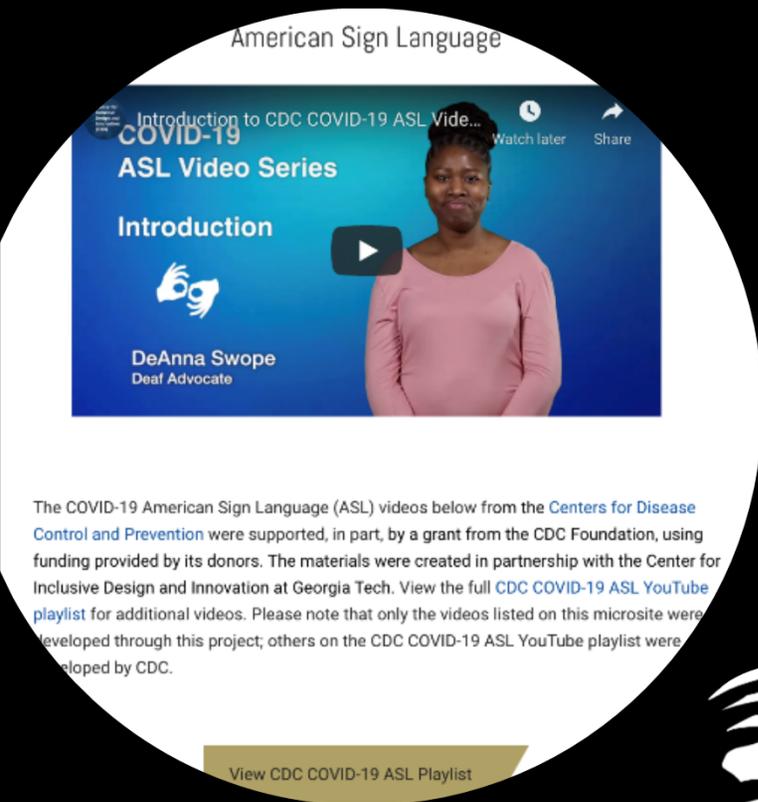
# What are we providing?

- A technique for developing ASL video scripts that use “native ASL” for more effective communication with Deaf users
- Easy access to braille, embossed or digital for refreshable braille displays
- Easy to Read resources simplified below Plain Language guidelines
- Web accessibility and best practices beyond Section 508 compliance
- Education and training resources to support the dissemination of the improved products and to share the processes for future uses

# Who needs these resources?

- Our specific audiences of focus are:
  - People who are Deaf or have hearing-related disabilities and users of ASL
  - People who are blind or have vision-related disabilities and use braille
  - People with intellectual and developmental disabilities and others who read or listen with understanding below a third-grade level
  - People with mobility issues that limit access to information
  - Families, caregivers and various healthcare providers who may benefit from the enhanced modes of messaging
  - Some people may have combinations of these disabilities, meaning that some of the message formats may be used by multiple audiences

# Improving ASL Videos

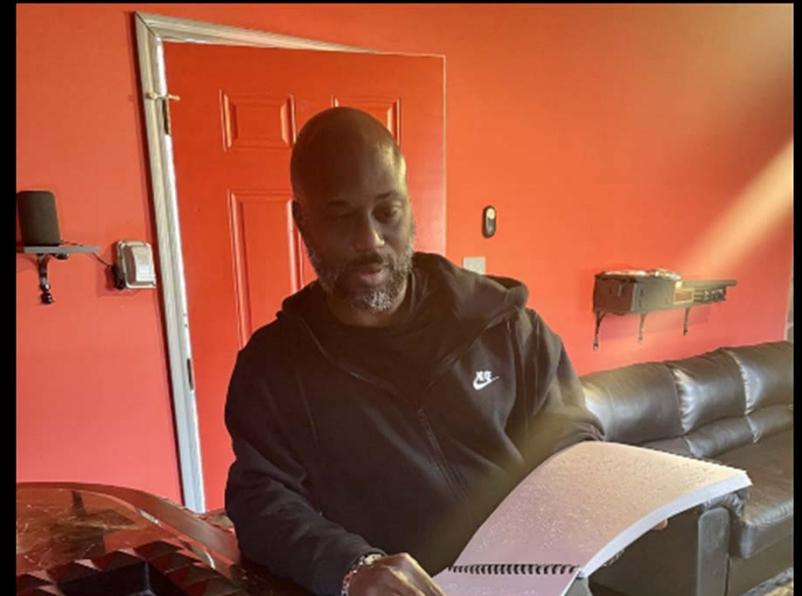


- ASL is a primary language, not a translation of English, for Deaf individuals who use it.
- Videos need to be in native ASL. We are working with CDC on a modified process which includes simplifying messages into more easily translatable language.
- ASL users also need:
  - Easily identifiable videos
  - Messaging about CDC guidance through channels they use frequently
  - [ASL resources on Georgia Tech microsite](#)



# Making Braille Easily Available

- Digital, braille-ready files
  - Documents remediated for accessibility
  - Available for download to refreshable braille displays
- Embossed Braille
  - Available through partners
  - Available by individual request through the CIDI microsite

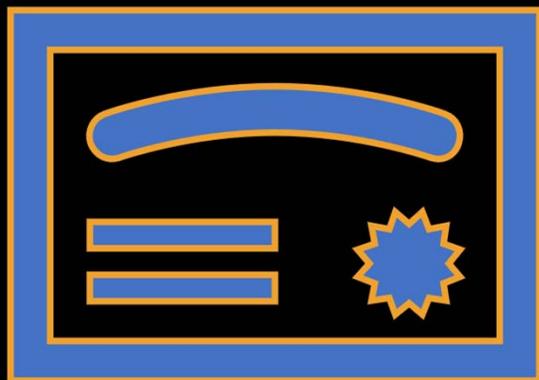


# Simplified Text

- Simplified text is needed for people with intellectual and developmental disabilities and others who read or listen with understanding below a third-grade level.
- This requires simplification much lower than the Plain Language guidelines – content at or below third-grade level. We are “simplifying” CDC guidance to this level.
- The process and tool, using the [Guidelines for Minimizing the Complexity of Text](#) prepared by the Center for Literacy and Disability Studies Department of Allied Health Sciences, School of Medicine University of North Carolina at Chapel Hill, are ground-breaking research and an application of research-based findings.



# Consulting Services: 508 / Best Practices



- Accessibility sometimes requires best practices that go beyond Section 508 compliance.
- Webpage accessibility
- PDF Remediation
- User Experience (UX) Accessibility

# Webinars and Trainings

Additional webinars are archived and can be accessed on the Georgia Tech microsite [www.cidi.gatech.edu/covid/training](http://www.cidi.gatech.edu/covid/training). Continuing Education Credits (CEU's and CRC's are available for all webinars.)

Webinar topics covered:

- Apps for Promoting Independence and Safety
- Sanitization of Personal Durable Medical Equipment
- A Closer Look: Face Masks and People with Disabilities
- A Closer Look: Mental Health and Resilience within the Disability Community during COVID-19
- Making Social Media Accessible for People with Disabilities
- A Closer Look: Guidance for Businesses and Employees Considering the Needs of People with Disability during COVID-19
- COVID-19 Vaccines for Caregivers and Personal Care Assistants (PCA)
- FAQs About COVID-19 Vaccines that People with Disabilities Should Consider

# GT Accessible Materials Microsite

The screenshot shows the Georgia Tech Center for Inclusive Design and Innovation (CIDI) website. The header includes the Georgia Tech logo and the text 'Center for Inclusive Design and Innovation COLLEGE OF DESIGN'. Below the header is a navigation menu with links for 'About', 'Research', 'Services', 'Education', 'Portfolio', 'News & Events', 'Contact', and 'Membership'. A search bar is also present. The main content area features a large blue banner with the text 'COVID-19 Accessible Resources'. Below the banner is a section titled 'COVID-19 Guidance & Resources' with a paragraph stating: 'Our goal is to increase access to information about COVID-19. This project was made possible with funding from the CDC Foundation. Resources on this site are adapted and accessible versions of CDC's COVID-19 guidance. For CDC's full guidance, please visit [www.cdc.gov/coronavirus](http://www.cdc.gov/coronavirus).' Below this is a section titled 'Resources by Accessibility Type' with the subtitle 'All resources and documents made available how you need them.' This section contains four cards: 'Braille Resources' (with an image of a woman at a desk), 'Accessible Word Documents & PDFs' (with an image of a laptop), 'ASL Resources' (with an image of hands in sign language), and 'Easy to Read' (with the text 'Simplified Text Learn About COVID-19'). Each card has a double arrow icon at the bottom.

The microsite at Georgia Tech/CIDI:

- Links to CDC guidance, videos, etc.
- Hosts some accessible materials.
- Hosts education, training, and supplementary resources.
- [www.cidi.gatech.edu/covid](http://www.cidi.gatech.edu/covid)

# Reaching Our Audiences of Focus

- The Dissemination Plan was an approach to partner with organizations serving our audiences of focus, capitalizing on existing channels to reach those who need accessible resources.
- Our partners at American Association on Health and Disability (AAHD) have been instrumental in outreach and dissemination.
- Identification of potential dissemination partners was undertaken with CDC Foundation and partners.
- Messages were made available for outreach and social media use templates for Twitter, Facebook, Instagram, and email outreach, etc.



**We appreciate  
your time!**

# Project #2 – COVID-19 Materials for People with Intellectual and Developmental Disabilities

- Resources on 5 topics based on feedback from formative testing:
  - Vaccination
  - Physical Distancing
  - Mask Wearing
  - COVID-19 Testing
  - Handwashing
- English/Spanish resources include:
  - Social Stories/Interactive Booklets
  - Posters
  - Animated Videos



Resources at: <https://www.cdc.gov/ncbddd/humandevelopment/COVID-19-Materials-for-People-with-IDD.html>

# Commit to Inclusion: What You Can Do

*Health equity means everyone has a fair and just opportunity to be healthy and no one is disadvantaged from achieving this potential because of social position or other socially determined circumstances.*



# Disability ALLY Campaign- Engage with CDC

(Summer 2021)

I'm a  
DISABILITY  
A.L.L.Y.

A

**Acknowledge** and respect individual experiences and abilities.

L

**Learn** about different disability types.

L

**Leverage** your influence to promote accessibility and inclusion.

Y

**Yield** the floor to people with disabilities to help identify and eliminate barriers.



**Is your local playground inclusive for all children?**

We all have a role to play in creating more inclusive communities for people with disabilities.



# Reminders for Inclusive Messaging

- ✓ Language
  - Plain language, simple text
  - Avoid emojis + special characters
  - Gender neutral language
  - Inclusive of those with disabilities
- ✓ Imagery (Photos, animations and graphics)
  - Use diverse imagery + icons (race, gender, physical appearance, disability)
  - Color contrast, font size and placement
- ✓ Accessibility
  - 508 compliant and beyond
  - Alt text and captions for images and videos
  - Avoid green and red or blue and yellow combinations (difficult to read)
  - Formats: ASL, Braille, simple text



# What Can YOU Do? Commit to Inclusion

- Learn about disability prevalence in your area
- Train staff and leadership
  - Share resources, check lists, reminders, and impact stories
  - Include a disability officer in planning efforts
- Consider adding or offering ASL to your videos, press conferences, internal meetings, and webinars as appropriate.
- Create easy to read content
- Use inclusive language and imagery
  - Person-first language: [Communicating With and About People with Disabilities](#)



Images source: <https://www.cdc.gov/ncbddd/humandevlopment/documents/DHDD-Strategic-Plan-h.pdf>

# What Can YOU do? Commit to Inclusion

- For COVID-19 work, visit the microsite hosted by Georgia Tech (<https://cidi.gatech.edu/covid>) and share accessible COVID-19 resources with colleagues and partners
- Learn how to make communications materials more accessible and inclusive
  - Request Deque University Axe Development Tools Access (<https://www.deque.com/axe/devtools/>) for online, real-time testing during development
  - Health Literacy and Plain Language trainings
  - *Guidelines for Minimizing the Complexity of Text*
    - <https://cidi.gatech.edu/sites/default/files/2021-02/Minimized%20Text%20Complexity%20Guidelines%20%5Bversion%202.03.2021%5D.pdf>
  - Webinar: Making Social Media Accessible for People with Disabilities
    - <https://www.dropbox.com/sh/cfzq15iooiaccfq/AAAXXp66VvsCkWkA3bVpXemYa?dl=0>

# Questions?



# Thank You!

For more information, contact CDC  
1-800-CDC-INFO (232-4636)  
TTY: 1-888-232-6348 [www.cdc.gov](http://www.cdc.gov)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

